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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/796,173	03/10/2004	Christian Dachauer	004640-044	3507

21839 7590 10/04/2004

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EXAMINER

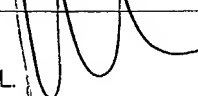
LU, JIPING

ART UNIT PAPER NUMBER

3749

DATE MAILED: 10/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/796,173	Applicant(s) DACHAUER ET AL. 	
	Examiner Jiping Lu	Art Unit 3749	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-13, 16-42 is/are rejected.
- 7) ☒ Claim(s) 14 and 15 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input checked="" type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>3/10/04 & 7/8/2004</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. Claim 15 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 15 recites the broad recitation of an area of bottom-side product passages, and the claim also recites essentially opposite of the metal sheet which is the narrower statement of the range/limitation.

Claim Objections

2. Claim 12 is objected to because of the following informalities: please change "approx." to -- approximate--. Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-7, 9-11, 16-19, 26-29, 31, 33-40 are rejected under 35 U.S.C. 102(b) as being anticipated by Petersen (U. S. Pat. 5,133,137).

Petersen shows a fluidized bed continuous thermal treatment of granular bulk material same as the broad claims. Petersen's device includes a product inlet 12, 24, 25 in a first chamber 13, a product outlet 23 in the last chamber 14 downstream from the first chamber 13 and several fluidization chambers (at 14, 17, 55) with several gas permeable sieve bottom 16, 17. The gas 18, 19 is injected into respective chamber 13, 14, to fluidize the granulate and exited in a roof area 20 of the device. Adjacent chambers are separated by separating walls 15. For claim 6, see openings 22. For claim 10, see 22a.

5. Claims 1-7, 9-11, 16-19, 26-29, 31, 33-40 are rejected under 35 U.S.C. 102(b) as being anticipated by Brassert et al. (U. S. Pat. 2,316,664).

Brassert et al. shows a fluidized bed continuous thermal treatment of granular bulk material same as the broad claims. Brassert's device includes a product inlet 4 in a first chamber

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(between 132 and 102), a product outlet 72 in the last chamber (near 78) downstream from the first chamber and several fluidization chambers with several gas permeable sieve bottom. The gas 22 is injected into respective chambers to fluidize the granulate and exited in a roof area 60 of the device. Adjacent chambers are separated by separating walls 132.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 12-13, 21-25, 41-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Petersen (U. S. Pat. 5,133,137) or Brassert et al. (U. S. Pat. 2,316,664).

The device of Petersen or Brassert et al. as above includes all that is recited in claim 12-13, 21-25, 41-42 except for the granulate size, chamber shape and type of bulk material.

However, it would have been an obvious matter of design choice to design the choose the size of

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the granular particle and the shape of the chamber with any desired size and shape in order to obtain the optimum result since applicant has not disclosed that the claimed size and shape solves any stated problem in a new or unexpected way or is for any particular purpose which is unobvious to one of ordinary skill in the art and it appears that the claimed feature does not distinguish the invention over similar features in the prior art . For claims 41, 42, to use the device of Petersen or Brassert et al. for treating PET or polymer granulate is deemed to be an obvious matter of uses.

9. Claims 8, 20, 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Petersen (U. S. Pat. 5,133,137) or Brassert et al. (U. S. Pat. 2,316,664) in view of Tanaka et al (U. S. Pat. 5,264,196) or Ziegler (U. S. Pat. 3,869,256).

The device of Petersen or Brassert et al. as above includes all that is recited in claims 8, 20, 30 except for the zigzag separator. Patent to Tanaka et al or Ziegler shows a zigzag alternating granulate path (up and down) same as the applicant's. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the fluidized bed of Petersen or Brassert et al. with a zigzag separating walls as taught by Tanaka et al or Ziegler in order to provide a serpentine path of granulate for better exchange.

10. Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Petersen (U. S. Pat. 5,133,137) or Brassert et al. (U. S. Pat. 2,316,664) in view of Sanderson (U. s. pat. 3,360,867).

The device of Petersen or Brassert et al. as above includes all that is recited in claim 32 except for the pivotable gate. Sanderson teaches a fluidized bed device with pivotable gate 40 same as claimed. Therefore, it would have been obvious to one having ordinary skill in the art at

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the time the invention was made to provide the device of Petersen or Brassert et al. with a pivotable gate as taught by Sanderson in order to control the product discharge.

Allowable Subject Matter

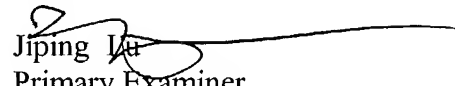
11. Claims 14-15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jiping Lu whose telephone number is 703-308-2354. The examiner can normally be reached on Monday-Friday, 9:00 AM - 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ira Lazarus can be reached on 703 308-1935. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Jiping Lu
Primary Examiner
Art Unit 3749

J. L.